

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (canceled)

2. (previously presented) A congestion control method for a network comprising:

a mobile user terminal located in a mobile network; a contents server for providing a contents service in the Internet; and a GW (gateway) server used as a repeater in the case where access is made from the mobile network to the Internet, wherein

association identifiers for identifying, as the flow of a series of services, screen informations ranging from information in a service top menu to supply information in contemplated service are imparted to respective screen informations in a tree structure constituting a web service provided by the contents server, and

upon the occurrence of congestion, priority connection control of the service being in connection is performed based on the association identifiers,

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end,"

upon the occurrence of congestion in the GW server, the GW server judges the association identifier contained in the screen information to be relayed, and

for a request for the connection of a service provided with an association identifier representing "continue," the relay of the transfer of service information is continued until an association identifier representing "end" appears, while for a request for the connection of a service provided with an association identifier representing "start," the connection is cut off.

3. (previously presented) A congestion control method for a network comprising:

a mobile user terminal located in a mobile network;

a contents server for providing a contents service in the Internet; and

a GW (gateway) server used as a repeater in the case where access is made from the mobile network to the Internet, wherein

association identifiers for identifying, as the flow of a series of services, screen informations ranging from information in a service top menu to supply information in contemplated service are imparted to respective screen informations in a tree structure constituting a web service provided by the contents server, and

upon the occurrence of congestion, priority connection control of the service being in connection is performed based on the association identifiers,

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end,"

upon the occurrence of congestion in the contents server, the contents server judges the association identifier contained in the screen information to be supplied, and

for a request for the connection of a service provided with an association identifier representing "continue," the relay of the transfer of service information is continued until an association identifier representing "end" appears, while for a request for the connection of a service provided with an association identifier representing "start," the connection is cut off.

4. (previously presented) The congestion control method according to claim 2, wherein

the Internet is connected to a public telecommunication network through a telephony service server,

association identifiers for identifying, as the flow of a series of services, screen informations ranging from information in a service top menu to supply information in contemplated service are imparted to respective screen

informations in a tree structure constituting a web service provided by the telephony service server, and

upon the occurrence of congestion, priority connection control of the service on connection is performed based on the association identifiers.

5. (original) The congestion control method according to claim 4, wherein

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end,"

upon the occurrence of congestion in the telephony service server, the telephony service server judges the association identifier contained in the screen information to be supplied, and

for a request for the connection of a service provided with an association identifier representing "continue," the transfer of service information is continued until an association identifier representing "end" appears, while for a request for the connection of a service provided with an association identifier representing "start," the connection is cut off.

6. (canceled)

7. (currently amended) A congestion control system for a network comprising:

a mobile user terminal located in a mobile network; a contents server for providing a contents service in the Internet; and a GW (gateway) server used as a relay device in access from the mobile network to the Internet, wherein

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of a tree structure constituting a web service provided by the contents server,

the GW server has the function of judging the association identifiers, contained in the screen information, as a series of service elements and the function of performing the priority connection control of a service being in connection upon the occurrence of congestion in the GW server, wherein,

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end," and

upon the occurrence of congestion, for a request for the connection of a service provided with an association identifier representing "continue," the means for performing the priority connection control of a service being in connection continues the transfer of service information until an association identifier representing "end" appears, while for a

request for the connection of a service provided with an association identifier representing "start," the means for performing the priority connection control of a service on connection cuts off the connection.

8. (currently amended) A congestion control system for a network comprising:

a mobile user terminal located in a mobile network; a contents server for providing a contents service in the Internet; and a GW (gateway) server used as a relay device in access from the mobile network to the Internet, wherein

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of a tree structure constituting a web service provided by the contents server,

the contents server has the function of judging the association identifiers, contained in the screen information, as a series of service elements and the function of performing the priority connection control of a service being in connection upon the occurrence of congestion in the contents server, wherein,

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end," and

upon the occurrence of congestion, for a request for the connection of a service provided with an association identifier representing "continue," the means for performing the priority connection control of a service being in connection continues the transfer of service information until an association identifier representing "end" appears, while for a request for the connection of a service provided with an association identifier representing "start," the means for performing the priority connection control of a service on connection cuts off the connection.

9. (previously presented) The congestion control system according to claim 7, wherein

a telephony service server for connecting the Internet to a public telecommunication network is provided,

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of a tree structure constituting a web service provided by the telephony service server, and

the telephony service server comprises: means for judging the association identifiers, contained in the screen information, as a series of service elements; and means for performing the priority connection control of a service being in

connection upon the occurrence of congestion in the telephony service server.

10. (previously presented) A congestion control system for a network comprising:

a mobile user terminal located in a mobile network; a contents server for providing a contents service in the Internet; and a GW (gateway) server used as a relay device in access from the mobile network to the Internet, wherein

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of a tree structure constituting a web service provided by the contents server,

the association identifiers are constituted respectively by identifiers representing "start," "continue," and "end,"

upon the occurrence of congestion, for a request for the connection of a service provided with an association identifier representing "continue," the means for performing the priority connection control of a service being in connection continues the transfer of service information until an association identifier representing "end" appears, while for a request for the connection of a service provided with an association identifier representing "start," the means for



performing the priority connection control of a service on connection cuts off the connection.

11. (previously presented) A congestion control system for a network comprising:

a mobile user terminal located in a mobile network; a contents server for providing a contents service in the Internet; and a GW (gateway) server used as a relay device in access from the mobile network to the Internet, wherein

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of a tree structure constituting a web service provided by the contents server,

the GW server has a user access management function, a congestion state management function, a service association identifier management function, and an association identifier management function, and

upon the receipt of a request from the mobile user terminal for access, the user access management function inquires of the congestion state management function about whether or not GW is in the state of congestion and, when GW has been found to be congested, refers to the association identifier management table through the service association identifier management function to judge whether or not the request from the mobile user

terminal for access is related to the service being continued, and, based on the results of judgment, decides whether the request for access is to be accepted or is to be rejected.

12. (previously presented) The congestion control system according to claim 11, wherein the association identifier management table comprises a terminal ID, a service screen identifier, and an association identifier, and

upon a request from the mobile user terminal for access, the GW server catalogs ID of the mobile user terminal, the identifier for the service screen of the accessed contents server, and the association identifier through the service association identifier management function into the association identifier management table and updates the data of the association identifier management table.

13. (original) The congestion control system according to claim 12, wherein, upon the receipt of a notice of the detection of the congested state from the congested state management function, the user access management function refers to the association identifier management table through the service association identifier management function, and, when the mobile user terminal ID inquired of the association identifier management table is not cataloged, or when the mobile user terminal ID inquired of the association identifier management

table is present and, at the same time, the association identifier on the requested service is "end," informs the user terminal that the requested service is inaccessible due to congestion, while, when the mobile user terminal ID inquired of the association identifier management table is present and, at the same time, the association identifier on the requested service is "start" or "continue," the user access management function judges that the requested service is related to the service being continued which has priority in connection under congestion, followed by a request to the contents server for the provision of service.

14. (previously presented) The congestion control system according to claim 11, wherein the congested state management function judges the congested state based on the usage of CPU in GW system.

15. (previously presented) The congestion control system according to claim 14, wherein the user access management function accepts all requests from the mobile user terminal for access until the usage of CPU reaches a first threshold; when the usage falls within the range of the first threshold to a second threshold, the user access management function accepts only a request for access wherein the association identifier is one of "start" and "continue", and, when the usage exceeds the second

threshold, the user access management function rejects all requests.

16. (previously presented) The congestion control method according to claim 3, wherein

the Internet is connected to a public telecommunication network through a telephony service server,

association identifiers for identifying, as the flow of a series of services, screen informations ranging from information in a service top menu to supply information in contemplated service are imparted to respective screen informations in a tree structure constituting a web service provided by the telephony service server, and

upon the occurrence of congestion, priority connection control of the service on connection is performed based on the association identifiers.

17. (previously presented) The congestion control system according to claim 8, wherein

a telephony service server for connecting the Internet to a public telecommunication network is provided,

association identifiers for performing the priority connection control of a service being in connection upon the occurrence of congestion are imparted respectively to screens of

a tree structure constituting a web service provided by the telephony service server, and

the telephony service server comprises: means for judging the association identifiers, contained in the screen information, as a series of service elements; and means for performing the priority connection control of a service being in connection upon the occurrence of congestion in the telephony service server.

18-20. (cancelled)